

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 7-25 are presently active, Claims 1-6 have been previously canceled without prejudice, Claim 10 is amended, and Claims 13-25 are added by the present amendment. No new matter is added.

In the outstanding Office Action, Claim 7 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 7-12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Higuchi et al. (US 4,293,357) and further in view of Yoshinori (EPO Application No. 03188191).

Regarding the 35 U.S.C. § 112, second paragraph, rejection of Claim 7, the specification is corrected to eliminate ambiguity of the definition of the term “amorphous.” The original specification did not mean that the amorphous silicon is crystalline, but that the amorphous silicon has a structure having a high degree of freedom. This correction clarifies that the amorphous silicon has a structure without a clear or apparent crystalline form; uncrystallized, as defined in Webster’s dictionary. Thus, it is respectfully submitted that the 35 U.S.C. § 112, second paragraph, rejection is overcome.

Regarding the rejection of Claims 7-12, Applicant respectfully submits that the rejection is overcome because, in Applicants’ view, amended independent Claim 7 patentably distinguish over the applied references as discussed below.

Claim 7 recites, *inter alia*, “wherein the ceramic block is formed with a composite material comprising ceramic particles and amorphous silicon.”

By forming the ceramic block with a composite material comprising ceramic particles and amorphous silicon, when the thermal stress is applied, even if fine cracks are created between ceramic particles, the growth of the cracks can be prevented.¹

The outstanding Office Action acknowledged that Higuchi et al. does not teach the user of amorphous silicon in the forming of a ceramic block (Office Action at page 3, lines 7-8). Instead, the outstanding Office Action relies on Yoshinori to remedy the deficiencies of Higuchi et al., stating that Yoshinori teaches the making of a composite body with a combination of silicon carbide and *metallic silicon* into a formed body which can be used to make a SiC-Si honeycomb structure (Office Action at page 3, lines 8-11). In this regard, the outstanding Office Action further states that the use of metallic silicon is considered to be amorphous silicon due to the vague nature of the specification description of what is considered to be amorphous silicon (Office Action at page 3, lines 16-21).

However, the specification is amended to clarify the meaning of “amorphous.” By this amendment, it is clarified that the amorphous silicon has a structure without a clear or apparent crystalline form; uncrystallized, as defined in Webster’s dictionary. Therefore, the metallic silicon disclosed in Yoshinori is not amorphous silicon as recited in Claim 7.

Thus, Higuchi et al. and Yoshinori fail to teach or suggest at least “wherein the ceramic block is formed with a composite material comprising ceramic particles and amorphous silicon,” as recited in Claim 7.

Accordingly, independent Claim 7 patentably distinguishes over Higuchi et al. and Yoshinori. Therefore, Claim 7 and the pending Claims 8-12 dependent therefrom are believed to be allowable.

¹ The specification at page 7, lines 9-12.

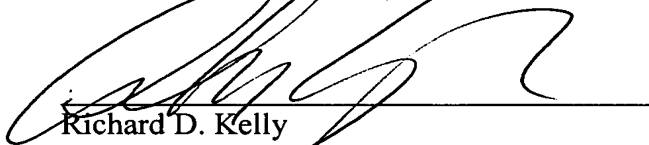
In addition, Higuchi et al. and Yoshinori fail to teach or suggest at least “wherein the ceramic member comprises a composite material including ceramic particles and amorphous silicon,” as recited in Claim 13 and “wherein the plurality of ceramic members each comprise a composite material including ceramic particles and amorphous silicon,” as recited in Claim 19.

Thus, independent Claims 13 and 19 also patentably distinguish over Higuchi et al. and Yoshinori. Therefore, Claims 13 and 19 and the pending Claims 14-18 and 20-25 dependent therefrom are believed to be allowable.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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